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ABSTRACT

A study was done to define the general image of vocational-technical education in Indiana as represented by a statistical sampling of respondents from a variety of categories of the general public, including junior and senior high school students, elementary and secondary teachers and school personnel, parents, and employers. A stratified random sample of twelve school systems was selected from a total population of 341 systems in Indiana. Utilizing a sixty-two item instrument, telephone interviews were conducted with 399 respondents. The conclusions were the following: (1) vocational education in Indiana is perceived more favorably than unfavorably; (2) the program areas within vocational education are not all viewed in the same manner by the population; (3) perceptions and opinions of vocational education are influenced more by personal and physical exposure to vocational education programs than by indirect or passive means; (4) school personnel have the rather negative perception that vocational education is low status; (5) junior high students, senior high students, parents, school personnel, and employers differ in their perceptions of various aspects of vocational education; and (6) respondents are not decisive regarding the appropriate levels at which career education should be included in the educational program. Five concise recommendations based on these findings are offered. (The interview instrument is appended.) (EM)

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TECHNICAL REPORT

Number Three

THE PUBLIC'S PERCEPTION OF SECONDARY VOCATIONAL EDUCATION IN INDIANA

written by

Betty A. Sawyers

Department of Education
Purdue University

RESEARCH DISSEMINATION SERVICE

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December 1977

U S DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION

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ABSTRACT

The Problem and Objectives

The purpose of this study was to define the general image of vocational-technical education in Indiana as represented by a statistical sampling of respondents from a variety of identified categories. The objectives of the investigation were to:

1. Determine the overall perception of secondary vocational education held by the general public.
2. Determine if there are differences in perceptions of the various program areas within vocational education.
3. Identify the perceptions of vocational education held by the following publics: (a) junior high school students, (b) senior high school students, (c) elementary and secondary teachers and school personnel, (d) parents and patrons of a school district, (e) employers of vocational education graduates.
4. Identify the determinants of a positive/favorable perception of vocational education.
5. Identify the determinants of a negative/unfavorable perception of vocational education.
6. Design strategies based on findings that can be employed to modify negative perceptions and strengthen positive perceptions.

Methodology

A stratified random sample of 12 school systems was selected from a total population of 341 schools/school systems in Indiana. Only high schools with one or more vocational education programs were included in the sample. Area vocational schools were excluded.

The sample was stratified based on eight factors: geographical location, population density, number of vocational

education programs, senior high students, junior high students, parents, school personnel, and employers.

Telephone interviews were conducted with 399 respondents in the identified categories by trained interviewers. Data were collected March, 1976 through June, 1976.

Results and Conclusions

Vocational education in Indiana is perceived more favorably than unfavorably. The program areas within vocational education are not all viewed in the same manner by the population. Perceptions and opinions of vocational education are influenced more by personal and physical exposure to vocational education programs than by indirect or passive means. School personnel have the rather negative perception that vocational education is *low status*. Junior high students, senior high students, parents, school personnel, and employers differ in their perceptions of various aspects of vocational education.

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CHAPTER I

INTRODUCTION

Background

National manpower surveys estimate that the number of young people who will enter the labor force in the 1970's will be a much greater number than the country has ever had to educate, train, and absorb into employment in any previous decade. An analysis of the kinds of jobs requiring workers reveals that there will be fewer available for the unskilled, inexperienced applicant. There will be a substantial increase in the demand for professional, technical, and skilled workers. Further analysis shows that by 1980, eighty percent of the jobs in the United States could be effectively performed by workers with less than a baccalaureate degree.

In our society there are many ways to develop human skills, including post-secondary education programs, on-the-job training, apprenticeship programs, and vocational and college preparatory curricula in secondary schools.

Public attitudes toward and perceptions of vocational-technical education affect the continued support of such educational programs and, hence, affect the development, implementation, and maintenance of them. Development of favorable public attitudes through observable results of vocational education requires a lengthy period of time and fails to maximize other effective techniques for influencing public opinion. There is agreement that relevant curricula, effective teaching, and sound administration are in some instances recognized by the public and make an essential contribution to creating a favorable image. There is also agreement that even the most effective and productive educational programs require continuous dynamic publicity, explanation, interpretation, and emphasis.

Public dollars are a public trust, and administrators and educators have a distinct responsibility to inform patrons concerning the purposes, functions, and needs of vocational-technical education. Availability of educational opportunities and achievements of participants are important aspects to include in publicizing any educational programs as is information about the vocational-technical education programs envisioned by the

1963 Vocational Education Acts. It is essential that employers who hire graduates, citizens who help pay the bill, those who are or will be program trainees, and parents who help influence career decisions should have an accurate and favorable perception of vocational-technical education which is based on solid information.

Research focusing on attitudes related to vocational-technical education indicates that findings from such studies can be employed to improve, strengthen, and expand vocational-technical educational programs. This study is designed to assess the public's perception of secondary vocational education in Indiana. It is hoped that findings resulting from this activity can be utilized at the state and local level to improve the image of secondary vocational-technical education by better communication of its programs.

Related Studies

The reviewed literature related to public opinion of vocational-technical education contains findings and recommendations useful in designing and conducting this study.

Attitudes of 120 local administrators regarding financing of vocational education in Michigan were explored in 1963 by Wenrich and VanDyke. They found that these administrators felt that few programs would be eliminated and that most programs would continue unaltered or with limited modification should salary reimbursement from state or federal funds be eliminated.

Wenrich and Ollenburger (1963) report a closely related study entitled *High School Principals' Perceptions of Assistance Needed in Order to Develop More Adequate Programs for Employment-bound Youth*. Principals perceived the greatest needs for assistance in (1) assessing the needs of in-school and out-of-school youths and the needs of employers and (2) operating specialized programs designed to prepare in-school youth for employment. A majority of the principals felt that they did not have time to give leadership to such programs.

In 1964, Wenrich and Crowley conducted research entitled *Vocational Education as Perceived by Different Segments of the Population*. They reported that the generally favorable attitude of parents toward education included vocational education. Parents wanted to see effective programs available for youth who were interested in and who could benefit from such programs. School teachers favored programs in general but were not satisfied with the scholastic records of students in vocational programs. It was also found that, because of their income

level, educational level, and occupational status, individuals whose support for an improved vocational program is necessary had little knowledge of the program. This lack of information could negatively influence their attitudes toward the program.

Other findings of this study include:

- There was no sharp division between men and women in their attitudes toward vocational education at the secondary level.
- Older persons tended to have less favorable attitudes than younger persons.
- Individuals classified as administrators and professionals had less favorable attitudes than individuals in other categories.
- Workers and administrators who had not had personal experience with vocational education had more favorable attitudes toward it than workers and administrators who had been personally involved.
- Respondents with advanced degrees tended to have unfavorable attitudes toward vocational education in high school.
- Individuals who were acquainted with students in vocational education had more favorable attitudes than those who were not.

The attitudes of public school administrators, vocational education supervisory personnel, and teacher educators in Ohio were assessed by Darrel L. Parks (1968). Recommendations for further study based on this research include:

1. Assessment of attitudes of vocational and non-vocational teaching personnel and guidance counselors toward vocational education.
2. Assessment of attitudes of business, industry, labor unions, and parents toward vocational education in the public schools.
3. Measurement of understandings about vocational education on the part of teachers, counselors, business, industry, labor unions, and parents.
4. Measurement of the effectiveness of vocational education programs in terms of placement, job performance, and advancement.

In a study conducted in Missouri, Gilliland (1967) measured the attitudes of slum dwellers and suburbanites toward blue collar occupations and vocational education. The sample included respondents from three socio-economic levels: upper, lower, and cross-sectional. When responses from all participants were analyzed together regardless of socio-economic level, he found that educators had the most favorable attitude toward vocational education. Parents had a slightly less favorable attitude. The mean attitude scale scores of students were considered favorable, although less so than those of educators and parents. In addition, students sampled indicated that they had had little experience in vocational education and did not desire to be involved in such educational programs. Gilliland concluded that prestige factors appeared to be involved in the attitudes of some respondents.

Attitudes toward occupational education held by school board members in 770 school districts in New York State were measured by James Spengler (1970). He found more positive attitudes held by board members of urban districts and cooperative educational services than board members of suburban or rural districts. Board members with a number of years of service tended to have more positive attitudes than members with little board experience.

The Ohio State Department of Education (1971) administered an instrument to 29,864 students and 15,463 parents to determine parent and student feelings about vocational education. Findings were that both adults and youth had positive feelings concerning vocational education. There was a strong indication that respondents felt teachers in vocational education programs should have related work experience prior to teaching. Slightly more than half the parents indicated that they were satisfied with educational programs in their schools. Students expressed less satisfaction with available programs.

Spooner (1971) designed and conducted a study of attitudes of school superintendents toward vocational education, comparing attitudes in districts that contract their vocational training out to other vocational school districts with those that do not. He found no significant difference in attitude between administrators in the two types of districts. Administrators also expressed no difference in attitudes toward the value of vocational education for students in different scholastic ranges.

In an extensive book-length study, *The Role of the Secondary Schools in the Preparation of Youth for Employment*, Kaufman (1967) and associates report that vocational education is still considered by many to be in some way *inferior* and that the term *dumping ground* is often applied to it. They found negative

attitudes among teachers toward vocational education, and teachers from exclusively vocational high schools had the most favorable attitudes toward vocational education. Academic teachers from comprehensive high schools ranked lowest in attitude toward vocational education and tended to reject any suggestions to expand vocational education programs. Such teachers held the view that vocational students had inferior ability. Apparently this attitude was communicated to vocational students in comprehensive schools because they reported feeling they were looked down on.

In the same study, personal interviews were conducted with 658 employers in nine cities using a structured schedule. Employers, especially those employing large numbers of workers, were less than enthusiastic about vocational education. Many expressed the belief that they could give better on-the-job training than that received by students in vocational programs. Of the employers included in this study, five indicated a strong preference for vocationally trained graduates. Employers who had experienced active contact and involvement with vocational education were more favorable in attitude than those who had not. One recommendation resulting from such findings was that administrators in vocational education need to assume leadership in stimulating the active participation in vocational education of all concerned segments of society.

Since 1941 the Purdue Opinion Panel has surveyed the attitudes, beliefs, and behavior of American youth. Poll No. 95 (1971) reports on the educational attitudes of more than 12,800 students in grades 10, 11, and 12 in public and private schools throughout the United States. It draws two general conclusions concerning educational attitudes. The first is that most high school students have positive attitudes about the value of education and feel that all people should have at least a high school education. Sixty-two percent of the students surveyed believed that school is important not only for its practical value but also because learning is worthwhile in itself.

The second conclusion focuses on teacher-student relationships. There is an optimal teacher-student relationship that facilitates a student's opportunity to succeed in the school environment. This facilitating relationship is a factor which helps students develop a favorable attitude toward school. Such a facilitating relationship is described by the study as one in which "all or most of the teachers: (1) encourage the students to do their best, (2) treat students as responsible individuals, (3) are willing to listen to students' opinions, (4) understand students, (5) are willing to employ students' suggestions, and (6) offer to help students develop effective study and work habits."

Positive attitudes toward school were found to be more prevalent among white than non-white students. Non-white students indicated a less positive attitude toward the value of high school education if it does not result in a job.

The Problem and Objectives

The purpose of this study is to define the general image of vocational-technical education in Indiana. Such an image derives from the attitudes which are shaped by people's perceptions. *Perception* is defined as awareness, understanding, cognition, and judgment. The literature of psychology defines an *attitude* as the degree of positive or negative affect associated with some psychological object as any symbol, phrase, person, institution, ideal, or idea. This investigation sets out to identify the degree of positive or negative feeling a statistical sampling of respondents has regarding vocational education.

The objectives of the study are to:

1. Determine the overall perception of secondary vocational education held by the general public.

2. Determine if there are differences in perceptions of the various program areas within vocational education.

3. Identify the perceptions of vocational education held by the following publics: (a) junior high school students, (b) senior high school students, (c) elementary and secondary teachers and school personnel, (d) parents and patrons of a school district, (e) employers of vocational education graduates.

4. Identify the determinants of a positive/favorable perception of vocational education.

5. Identify the determinants of a negative/unfavorable perception of vocational education.

6. Design strategies based on findings that can be employed to modify negative perceptions and strengthen positive perceptions.

CHAPTER II

PROCEDURES

The Sample

The State Board of Vocational and Technical Education (SBVTE) recommended data collection by telephone contact and interview. Because details involved in this method are complex and time consuming, sampling the population was chosen as a manageable approach for a limited study. A stratified random sample of twelve school systems was selected from a total population of 341 schools/school systems in Indiana. Only high schools with one or more vocational education programs were included in the population from which the sample was selected (Appendix B).

The project advisory council recommended that area vocational schools be excluded, the reason being that individuals from an area vocational school selected for interviews would differ from those representing schools with vocational programs and other educational programs.

SBVTE records were utilized to identify schools with approved vocational programs for the 1975-76 school year. Included were the following types of programs: agribusiness, health occupations, distributive education, home economics, business and office education, industrial education, prevocational education, and interdisciplinary cooperative education.

A total of 341 schools constituted the population (Table 1). The sample was stratified based on eight factors. Tables 2 and 3 summarize the stratification distribution.

The Indiana Planning and Development Regions were used as a basis for dividing the state into north and south sections. Regions numbered 1-6 formed the section specified *north* and regions numbered 7-14 constituted the section specified *south*.

Urban, suburban, and rural were the three classifications used which relate to population density. *Urban* was defined as a city with a population of 100,000 or more. *Suburban* was defined as areas outside urban boundaries and within a twenty-mile radius. *Rural* included all other geographic areas.

TABLE 1: POPULATION FROM WHICH THE SAMPLE WAS SELECTED

Factors	*Number of school systems*
Urban North 1-3 programs	16
Urban South 1-3 programs	16
Urban North 4+ programs	5
Urban South 4+ programs	9
Suburban North 1-3 programs	11
Suburban South 1-3 programs	7
Suburban North 4+ programs	2
Suburban South 4+ programs	1
Rural North 1-3 programs	108
Rural South 1-3 programs	107
Rural North 4+ programs	37
Rural South 4+ programs	22
TOTAL	341

Categories based on number of vocational programs included the following groupings: schools with from one to three *(1-3)* programs and schools with four or more *(4+)* programs.

Hence there were the following six classifications for schools in the north region: north, urban, 1-3 programs; north, urban, 4+ programs; north, suburban, 1-3 programs; north, suburban 4+ programs; north, rural, 1-3 programs, and north, rural, 4+ programs. Using the same scheme, there were six similar categories in the south region.

Identified schools were numbered consecutively within their classification, and a table of random numbers was used to identify the twelve schools included in the sample. A first, second, third, and fourth alternate school in each category was selected to replace a principal school should it be unable to participate. It became necessary to use the second alternate school for the urban, south, 4+ programs. The first alternate school was used for the suburban, south, 1-3 programs.

The superintendent of schools for each of the twelve schools was contacted by letter to obtain permission for the school to participate in the study. Following such permission, a graduate assistant visited each school and selected the sample.

TABLE 2: STRATIFICATION FOR FACTORS: GEOGRAPHICAL LOCATION, POPULATION DENSITY, AND NUMBER OF PROGRAMS

Stratification Classification	*Random sample*	
	n	%
North	206	51.6
South	193	48.4
TOTAL	399	100.0
Urban	129	32.33
Suburban	143	35.84
Rural	127	31.83
TOTAL	399	100.00
1-3 Vocational Education Programs	186	46.6
4+ Vocational Education Programs	213	53.4
TOTAL	399	100.0

TABLE 3: STRATIFICATION OF PARTICIPANTS

Classification	*Random sample*	
	n	%
Junior High Student	86	21.5
Senior High Student	79	19.8
Parents	85	21.3
Teachers	66	16.5
School Administrators	11	02.8
Employers	60	15.0
Guidance Counselors	12	03.0
TOTAL	399	100.0

Enrollment records, lists of school personnel, and records of employer's names were numbered consecutively. A table of random numbers was used to identify individuals who would be contacted. Alternates in each category were also identified in this manner. In the case of parents, the table of random numbers was used to identify students whose parent (either mother or father) would be contacted and asked to respond to the questionnaire.

In order to obtain respondents in the junior high category it became necessary in several instances to identify these students from junior high schools affiliated with the senior high school in the school sample (Appendix B).

It was necessary to obtain a signed informed consent form from individuals in the sample who were under eighteen years of age. Telephone numbers of students were released when such forms had been received. Individuals over eighteen were contacted, a statement informing them of the purpose of the study and assuring them of protection of privacy was read to them. Before they were asked any questions each individual could agree or refuse to participate in the study. Three hundred and ninety-nine respondents provided data for this study. Table 3 provides a detailed summary of individuals included in the study.

The Instrument

The instrument used in this study consisted of 62 items describing aspects directly related to the objective of the investigation. A number of statements used were taken from studies reviewed in the literature. Other statements were developed and submitted to a jury composed of university vocational educators, directors of area vocational schools, and graduate students in vocational education who were asked to sort the statements into two groups: those that tended to reflect favorably on vocational education and those that tended to reflect unfavorably on it. To be included in the field test instrument, a statement had to be selected for the same category by 80 percent of the jurors.

The instrument was prepared with the selected statements, and five possible responses: strongly agree, agree, uncertain, disagree, and strongly disagree. As the data was to be collected by telephone, several field tests were conducted.

A variety of university students responded verbally to the statements as they were read aloud. There was confusion concerning the response categories. Several statements were rephrased and clarified.

A second test was conducted by telephone interviews with friends and teaching colleagues. Again, there was confusion concerning the five possible responses. As a result of this test, the categories for most statements were modified to include agree, uncertain, disagree, don't know, and no opinion.

During the testing of the instrument, it became evident that respondents did not differentiate between vocational education, occupational education, and career education. As a consequence, all three terms were included in many of the statements in the instrument to be sure that all aspects of the field in question would be considered when responses were made.

A final form of the instrument was prepared and reviewed by selected participants of the Indiana Leadership Development Program for Vocational Administrators and by five of the six advisory council members. The eight interviewers also tested the instrument by calling five additional persons each. Respondents in this final testing step had no difficulty in understanding and responding to the items. Information from these respondents was not included in the analysis of data.

In the final instrument statements were grouped as substatements under prime numbers; e.g., 15(1), 15(2), 15(3) . . . in order for the interviewer to refer to 22 major statements instead of 62 items.

Data Collection

Participants in this study responded to the instrument by telephone interview. In order to control interviewer bias each of eight trained interviewers contacted an equal number of respondents in each of the twelve schools. Attempts to make contact were repeated until the participant was reached.

Each item was read in its entirety and then repeated to facilitate the participant's forming a response. Interviewers followed the instrument closely and refrained from interjecting any wording other than that included in each item. When necessary, the interviewer could repeat an item.

Telephone calls were made in late afternoon and early evening Monday through Friday and on Saturday between the hours of 10:00 a.m. and 4:00 p.m. Responses were recorded by hand on an answer sheet.

When intended respondents had moved, discontinued telephone service, or could not be reached for similar reasons, an alternate respondent was contacted.

Statistical Analysis

Standard statistical indicators, the computed arithmetical mean for total *n* for each variable, and the standard deviation were analyzed to interpret the overall perception of vocational education in this study.

Pearson product-moment correlation coefficients were used to identify statements constituting profiles for each of six population segments. The correlation coefficient, *r*, was used to measure the strength of the relationship between each two appropriate variables. Tests of significance for each coefficient were computed. Statements with significance at the .01 and .05 level were included in a population segment profile.

Factor analysis was employed to permit the researcher to explore underlying patterns of relationships in the data which resulted in more summarized data. This analysis consisted of three major steps. (1) preparation of the total inter-variable correlation matrix, (2) extraction of initial factors, and (3) rotation to terminal factors. (A VARIMAX rotation was employed in this analysis.) Factor-score coefficients for each variable for respective factors resulted.

Factor scales were constructed employing only those variables that had substantial loadings on a given factor. Variables with a factor-score coefficient of .35 or greater were utilized in identifying the eleven factors discussed.

CHAPTER III

FINDINGS

The findings of this study are discussed in three sections: (1) the general perception of vocational education in Indiana as indicated by responses from 399 participants in this survey, (2) the perceptions of vocational education as represented by the specific groups of responding participants, and (3) factors that are viewed as important in relation to vocational education.

Overall Perception of Vocational Education

Respondents in this study indicated a more favorable than unfavorable perception of vocational education in Indiana. Analysis of responses indicate that there are no significant differences resulting from residence in the north or south of the state. The number of vocational education programs in the school and whether or not the school is urban or rural makes no significant difference in how respondents perceive secondary vocational-technical education in Indiana. Analysis of the responses of participants to sixty-two items describing numerous aspects of vocational education provides the following summary. At least eighty-nine percent of the respondents indicate almost complete agreement with sixteen items, ninety-three percent or more indicate only slightly less agreement with six other items, and eighty-nine percent or more indicate more agreement than indecision concerning twenty additional items (Tables 4, 5, and 6).* Statement identification in abbreviated form is included for each item in the table. Reference to the instrument in Appendix A should be made for the exact and full text of each statement. On fourteen items eighty-nine percent or more indicate indecision. At least eighty-three percent state disagreement with nine of the sixty-two items (Tables 7 and 8).*

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* A mean of 3 indicates complete agreement; means of 2.99--2.35 are degrees of less agreement; 2.34--2.01 are degrees of indecision; 2.00 is complete indecision, and means of 1.99 or less indicate levels of disagreement.

TABLE 4: ITEMS WITH WHICH RESPONDENTS SHOWED THE MOST AGREEMENT

Item number and focus		*Mean*
18(5)	offer career ed. in high schools	2.97
18(6)	offer career ed. in jr. colleges and tech. schools	2.94
15(1)	offer job entry skills training in trade & industry	2.92
11	guide boys and girls to any occupational program	2.92
7	inform more parents of values of occupational ed.	2.92
15(4)	offer job entry skills training in office & business	2.91
3	voc. ed. benefits communities	2.90
18(4)	offer career ed. in jr. high schools	2.84
21(1)	important to use voc. ed. funds for high school programs	2.84
17(4)	graduates have limited chance for advancement	2.83
15(7)	offer job entry skills training in technical fields	2.82
18(8)	offer career ed. in adult ed. programs	2.81
12	give more school money to occupational ed.	2.79
17(1)	graduates are suited only for unskilled work	2.79
17(2)	graduates work with hands not minds	2.78
17(5)	graduates have variety of advancement opportunities	2.76

TABLE 5: ITEMS WITH WHICH RESPONDENTS SHOWED INTERMEDIATE AGREEMENT

Item number and focus		*Mean*
15(2)	offer job entry skills training in agribusiness	2.74
6	give more emphasis in high school to earning a living	2.73
15(5)	offer job entry skills training in health occupations	2.73
18(7)	offer career ed. in four year colleges and universities	2.68
16(1)	important to include trade & industry programs	2.67
2	voc. ed. helps prevent high school drop-outs	2.65

TABLE 6: ITEMS WITH WHICH RESPONDENTS SHOWED THE LEAST AGREEMENT

Item number and focus		*Mean*
16(4)	important to include office & business programs	2.64
16(7)	important to include technical fields programs	2.63
13	occupational ed. hinders students from higher ed.	2.60
19(3)	voc. ed. needs same facilities & equip. as academic	2.60
17(3)	graduates are skilled workers	2.59
21(3)	important to use voc. ed. funds for new facilities	2.59
16(5)	important to include health occupations programs	2.59
21(5)	imp. to use voc. ed. funds for special needs students	2.58
10	gear occupational ed. for low academic students	2.56
20(1)	teachers should have high skill, work exp., degree, & license	2.54
9	voc. ed. not needed for efficient labor supply	2.52
15(6)	offer job entry skills training in home ec.	2.51
18(3)	offer career ed. in middle schools	2.50
16(2)	important to include agribusiness programs	2.43
21(2)	imp. to use voc. ed. funds for out-of-school youth	2.42
8	provide free occupational ed. after high school	2.39
15(3)	offer job entry skills training in sales & service	2.37

TABLE 7: ITEMS ABOUT WHICH RESPONDENTS SHOWED INDECISION

Item number and focus		*Mean*
5	voc. ed. is not provided soon enough	2.34
22(3)	printed information influenced my opinion of voc. ed.	2.32
22(4)	teachers & administrators influenced me	2.31
4	voc. ed. is seen as less desirable than college prep.	2.25
14	most high school occ. ed. programs are out-of-date	2.25

continued on next page

TABLE 7 *continued*

16(6)	important to include home ec. programs	2.08
19(1)	voc. ed. needs highly specialized facilities & equip.	2.06
22(5)	visiting voc. ed. programs influenced me	2.06
16(3)	important to include sales and service programs	2.04
21(4)	important to use voc. ed. funds for academic programs	2.03
22(2)	student who is enrolled in voc. ed. influenced me	2.02
20(2)	teachers should have high skill, work exp., & degree	2.02
20(3)	teachers should have high skill & work exp. only	1.93
1	reading, writing, math more important than voc. ed.	1.87

TABLE 8: ITEMS WITH WHICH RESPONDENTS DISAGREED

Item number and focus		*Mean*
22(6)	comments of community members influenced my opinion	1.81
18(2)	offer career ed. in elementary grades	1.80
19(2)	voc. ed. can adapt regular facilities and equipment	1.80
20(4)	teachers should have some skill, limited work exp., degree, & license	1.57
22(1)	my participation in voc. ed. influenced my opinion	1.54
19(4)	voc. ed. can borrow facilities & equip. from industry	1.52
22(8)	did not know much about voc. ed.	1.48
18(1)	offer career ed. in K-3	1.38
22(7)	T.V. influenced my opinion of voc. ed.	1.35

Respondents indicate that communities which have vocational education programs realize beneficial results from such programs. It is the general view that for many students in high school there should be more emphasis on earning a living through an occupational education program than there is currently. Respondents also indicate that they feel vocational education in the public schools serves to prevent some high school students from becoming drop-outs. Graduates of vocational education programs

are perceived as having a variety of avenues of advancement open to them.

Respondents in this survey indicate that both boys and girls should be encouraged to enter any occupational education program and that more of the school budget should be allocated for occupational education.

Career education, defined for the respondents as "facts that inform students about kinds of jobs and the skills needed for such jobs plus opportunities to gain skill in one or more areas," is not viewed as important to include in kindergarten, primary, or elementary curricula. It is seen as forming a part of the curricula for junior high school, senior high school, junior and technical colleges, universities, and adult education.

There is agreement that vocational education should offer students the opportunity to gain job entry skills in occupations identified as trade and industry, in business and office education, and in technical fields. Less agreement is indicated in relation to job entry skills for occupations in agribusiness and in homemaking and related service occupations. Respondents are undecided about or do not feel it important to offer students an opportunity to gain job entry skills in other types of occupations.

The status and ability of students and graduates of vocational education programs is not viewed positively by respondents in this study. This is indicated by their agreement with statements describing graduates of vocational education programs as individuals generally suited for unskilled work only and as workers who use their hands rather than their minds.

There is slightly more agreement than indecision concerning ideas such as making available free occupational education after high school and using funds for vocational programs for out-of-school youth and adults and for people with special needs. There is more agreement than indecision concerning the use of funds for buildings and equipment and the perception of graduates of vocational education programs as skilled workers.

Persons responding to the instrument used in this study are undecided concerning the issue of whether to use educational resources primarily for academic preparation or vocational education. This indecision parallels their inability to decide whether students enrolled in vocational education programs are thought to be in a less desirable program than general or academically oriented students.

Respondents are undecided whether or not most public schools provide vocational education early enough.

Participants are undecided whether or not occupational educational programs currently offered in high schools are up-to-date or out-of-date. There is indecision as to whether or not equipment and facilities required for vocational programs need to be highly specialized.

The professional background, skill, and work experience of vocational teachers is not perceived clearly by respondents. They are undecided about whether the teacher should have a university degree and a teaching license in addition to a high degree of skill and work experience.

Respondents are also undecided about whether or not vocational education is needed to insure an adequate and efficient labor supply.

Disagreement with statements related to offering career education in kindergarten and the elementary grades might be interpreted several ways. It might be that there is little understanding of what constitutes a total career education model K-12. Possibly a number of respondents view career education as dealing chiefly with skill development. Others might not be aware of how career education K-6 can be integrated into the basic curriculum. Future investigators might find that it is desirable to provide a more detailed description of the career education model which includes differentiations for each level.

Perception Profiles of Respondent Groups

Support for vocational education comes from numerous individuals, businesses, and groups within a school corporation or district. In order to maximize promotional activities it would be beneficial for vocational educators to know the different ways vocational education is viewed by various populations. If there were differences in perception, the identification of those aspects which are viewed in a less favorable or negative light would enable educators to inform the public and to enlist their support.

The responses to individual items for each of five groups; junior high school students, senior high school students, parents of school students, employers, and school personnel (teachers, guidance counselors, and administrators) are correlated with the item responses made by all other participants. A correlation coefficient which shows a significant difference indicates a characteristic of the specific population involved. A profile, descriptive of perceptions for identified groups, might be drawn from an analysis of variables which have a significant level of .01 and .05.

Profile of Parents

Parents indicate that it is more important to provide many students with vocational education than it is to use the time for basic education. They do not support free occupational education after high school. This finding may require further investigation as it is very different from the viewpoint of both junior and senior high school students (Table 9).

Possibly parents in this sample think that their children will not avail themselves of occupational training after high school and are, therefore, non-supportive. Free occupational education after high school might also be viewed as a measure that would increase taxation. Currently in the nation there is resistance to educational efforts that increase taxes.

Parents included in this sample indicate that only the one area of homemaking and related service occupations is important to include in the vocational education curriculum and that students should have an opportunity to develop skill in this area. Parents show negative responses to providing students with opportunities to gain job entry skills in the trade and industry area, and they do not place importance on including skill development in other vocational education areas of agribusiness, business and office education, distributive education, and health occupations even though they do not indicate a negative view of the latter groups.

Parents view facilities and equipment needed for vocational education programs as being no different than those needed for academic classes. This finding suggests that parents should be exposed to more information concerning facilities and equipment. Open house, visitation, field days, back-to school sessions, or other activities could increase awareness of requirements for effective vocational education programs.

Parents in this sample indicate that they are not enrolled in nor have they completed vocational education programs. Their opinions about vocational education have not been influenced by general discussion in the community nor by explanations of vocational education by teachers and school administrators. This condition suggests need for a more active public relations program by vocational teachers and area directors.

Profile of Senior High School Students

Unlike the parents in this study, senior high school students indicate interest in free occupational education after high school (Table 10). They perceive graduates of vocational education programs as being skilled workers.

TABLE 9: SIGNIFICANT CORRELATIONS OF PARENTS' RESPONSES TO ITEMS

Item number and focus		*Correlation coefficient*	*Level of significance*
1	reading, writing, math more important than voc. ed.	-.140	.006
8	provide free occupational ed. after high school	-.145	.026
15(1)	offer job entry skills training in trade & industry	-.113	.026
15(6)	offer job entry skills training in home ec.	.114	.025
16(6)	important to include home ec. pgms.	.123	.014
19(3)	voc. ed. needs same equip. & facilities as academic	.107	.040
20(1)	teachers should have high skill, work exp., degree, & license	-.155	.002
20(3)	teachers should have high skill & work exp. only	.141	.005
20(4)	teachers should have some skill, limited work exp., degree & license	-.132	.009
22(1)	my participation in voc. ed. program influenced me	-.234	.001
22(4)	teachers and administrators influenced me	-.307	.001
22(6)	comments from community members influenced me	-.131	.009

Senior high school students do not think it important to include sales and service training or homemaking and related service occupations in the vocational education program. They indicate negative attitudes toward opportunities to develop skills in these two areas. They do not indicate that it is important to include agribusiness, business and office education, health occupations, and trade and industry training, but their responses are not negative.

Responses from senior high school students indicate that career education should not be included in kindergarten through

TABLE 10: SIGNIFICANT CORRELATIONS OF SENIOR HIGH SCHOOL STUDENTS' RESPONSES TO ITEMS

Item number and focus		*Correlation coefficient*	*Level of significance*
8	provide free occupational ed. after high school	.140	.006
15(3)	offer job entry skills training in sales & service	-.144	.005
15(6)	offer job entry skills training in home ec.	-.176	.001
16(3)	important to include sales & service programs	-.172	.001
16(6)	important to include home ec. pgms.	-.147	.003
17(3)	graduates are skilled workers	.118	.022
18(1)	offer career education in K-3	-.109	.031
18(2)	offer career ed. in elementary gr.	-.172	.001
18(3)	offer career ed. im middle schools	-.100	.046
20(1)	teacher should have high skill, work exp., degree, & license	.158	.002
20(2)	teacher should have high skill, work exp., & degree	.108	.032
20(3)	teacher should have high skill & work exp. only	.128	.012
22(1)	my participation in voc. ed. program influenced me	.164	.001
22(4)	teachers and administrators influenced me	.134	.007

middle school. They do not think it important to include career education beyond middle school but indicate no negative attitudes toward it.

High school students want vocational teachers to hold a university degree in addition to being highly skilled and having work experience. A majority of these high school students sampled indicate that they are enrolled in vocational education and that their opinion of vocational education has been influenced by explanations given by teachers and school administrators.

Profile of Junior High School Students

There are significant correlations on slightly more than half of the items for the junior high school group. Thus, discussion will include only items with test significance at the .01 level (Table 11).

Significant correlations for junior high school students give the impression that this group is not decisive in its views of vocational education. The results of the correlations can be seen as perceptions held by a group lacking information related to the topic since this group indicates that it does not know much about vocational education. Junior high students in this study have not read materials describing vocational education programs nor have they visited or observed vocational education programs. They indicate that they are enrolled in vocational programs which further implies misconceptions as there are no vocational education programs per se at the junior high school level in Indiana. They indicate that their opinions have been influenced by information from television.

A summary of the statements with which junior high students show agreement supports research findings that this age group is self-concerned and has not developed an other- or community-orientation. The junior high students are interested in career education in middle school but not in senior high school or in adult programs. They are interested in free occupational education after high school and view as important the use of vocational education funds for programs and services for high school and out of high school youth. They have a negative view of using vocational education funds for academic programs.

Junior high school students do not think vocational education programs should be geared to students of low academic ability. They do not see graduates of vocational education programs as workers with their hands rather than their minds. Nor do they feel that they would be hindered from obtaining education beyond high school due to a vocational education. They do not see opportunity for career advancement as being limited if they were to complete a vocational education program.

Students in this category view facilities and equipment for vocational education as being different from those needed for academic classes. Junior high school students in this study place a higher value on university degrees and teaching licenses than on high degrees of skill and work experience in vocational education teachers.

This group of students does not think vocational education serves to prevent students from becoming drop-outs nor do they think vocational education benefits the community. The junior

TABLE 11: HIGHLY SIGNIFICANT CORRELATIONS OF JUNIOR HIGH SCHOOL STUDENTS' RESPONSES TO ITEMS

Item number and focus		*Correlation coefficient*	*Level of significance*
2	voc. ed. helps prevent high school drop-outs	-.141	.007
3	voc. ed. benefits communities	-.216	.001
7	inform more parents of values of occupational ed.	-.144	.005
8	provide free occupational ed. after high school	.179	.001
10	gear occupational ed. for low academic students	-.307	.001
13	occupational ed. hinders students from higher ed.	-.280	.001
15(6)	offer job entry skills training in home ec.	-.180	.001
16(1)	important to include trade & industry programs	-.133	.008
18(3)	offer career ed. in middle schools	.138	.006
18(5)	offer career ed. in high schools	-.130	.009
19(3)	voc. ed. needs same facilities & equip. as academic	-.144	.005
20(1)	teachers should have high skill, work exp., degree, & license	.177	.001
20(2)	teachers should have high skill, work exp., & degree only	-.137	.007
20(3)	teachers should have high skill & work exp. only	-.262	.001
20(4)	teachers should have some skill, limited work exp., degree, & license	.148	.004
21(1)	important to use voc. ed. funds for high school programs	-.208	.001
21(2)	important to use voc. ed. funds for out-of-school youth	-.141	.005
21(4)	important to use voc. ed. funds for academic programs	-.237	.001

high school students do not think it important to offer vocational education programs in trade and industry nor in homemaking and related service occupations. While they indicate no negative attitudes toward other vocational program areas, they place no importance on including them in the curriculum either. They do not feel that parents need to be better informed about the value of vocational education.

Profile of School Personnel

Responses of teachers, guidance counselors, and administrators are combined to provide a total population of school personnel which is comparable to the other populations of junior high school students, senior high school students, parents, and employers. A study of the correlations of responses from this group provides the following profile of school personnel.

Teachers, guidance counselors, and administrators perceive vocational education as hindering students from gaining further education after high school (Table 12). They think that vocational education programs should be geared mainly to youth of limited academic ability, that graduates of vocational education programs work with their hands and not their minds, and that these graduates have little or no opportunity for occupational advancement. This group indicates that earning a living should not receive greater emphasis through inclusion of occupational education programs in high school. They do not favor free occupational education after high school nor are they in favor of setting aside more of the school budget for occupational education. This group sees facilities and equipment needed for vocational education as being no different than those needed for academic programs. Such a view might be expected from non-vocational educators who were uninformed about the purposes and practices of vocational education programs. However, school personnel respondents report that they are knowledgeable about vocational education and that their opinions of vocational education have been influenced by reading materials describing vocational education programs, by visiting and observing such programs, and by discussion with and comments from community members.

In keeping with their general view of the status of vocational education, school personnel indicate that from the seven broad groupings of (1) trade and industry, (2) agribusiness, (3) marketing and distribution services, (4) business and office, (5) health occupations, (6) homemaking and related service occupations, and (7) technical fields, students should have an opportunity to obtain job entry skills only in trade and industry types of occupations and in homemaking and related services.

Members in this sample disagree with the view that most vocational education programs currently offered in high school are out-of-date.

This group thinks that career education should be taught in kindergarten through middle school and that it is an important use of vocational education funds to provide programs and services for special needs persons and for out-of-school youth. Responses from these teachers, guidance counselors, and administrators indicate that they think academic programs are an important use for vocational funds though such a use is not provided by current legislation.

Regarding the qualifications of vocational teachers, the school personnel place slightly more importance on high degrees of skill and work experience than on university degrees and teaching licenses.

TABLE 12: SIGNIFICANT CORRELATIONS OF SCHOOL PERSONNEL'S RESPONSES TO ITEMS

Item number and focus		*Correlation coefficient*	*Level of significance*
6	give more emphasis in high school to earning a living	-.108	.034
8	provide free occupational ed. after high school	-.202	.001
10	gear occupational ed. for low academic students	.239	.001
12	give more school money to occupational ed.	-.149	.004
13	occupational ed. hinders students from higher ed.	.122	.018
14	most high school occ. ed. programs are out-of-date	.202	.001
15(1)	offer job entry skills training in trade & industry	.120	.018
15(6)	offer job entry skills training in home ec.	.169	.001
16(6)	important to include home ec. pgms.	.190	.001

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TABLE 12 *continued*

17(2)	graduates work with hands not minds	.120	.045
17(4)	graduates have limited chance for advancement	.115	.025
18(1)	offer career ed. in K-3	.277	.001
18(2)	offer career ed. in elementary grades	.212	.001
18(3)	offer career ed. in middle school	.133	.008
19(3)	voc. ed. needs same facilities and equip. as academic	.176	.001
20(2)	teachers should have high skill, work exp., & degree	.141	.005
20(3)	teachers should have high skill & work exp. only	.167	.001
21(2)	important to use voc. ed. funds for out-of-school youth	.163	.001
21(4)	important to use voc. ed. funds for academic programs	.237	.001
21(5)	important to use voc. ed. funds for special needs students	.130	.011
22(1)	my participation in voc. ed. program influenced me	-.110	.029
22(5)	visiting voc. ed. programs influenced me	.216	.001
22(6)	comments from community influenced me	.109	.030
22(8)	did not know much about voc. ed.	-.146	.004

Profile of Employers

Employers of vocational education trainees constitute an important segment of the population concerned about vocational education. Their rating of employees who have been trained in vocational education programs, in conjunction with the employment record established by graduates, is a measure by which vocational education programs can be evaluated.

The employers included in this study think that students should have an opportunity to obtain job entry skills in trade and industry types of occupations and that graduates of vocational education programs are skilled workers. This group does

TABLE 13: SIGNIFICANT CORRELATIONS OF EMPLOYERS' RESPONSES TO ITEMS

Item number and focus		*Correlation coefficient*	*Level of significance*
1	reading, writing, math more important than voc. ed.	.180	.001
13	occupational ed. hinders students from higher ed.	.187	.001
14	most high school occ. ed. programs are out-of-date	.202	.001
16(1)	important to include trade & industry programs	.099	.049
17(3)	graduates are skilled workers	.211	.001
18(1)	offer career ed. in K-3	-.129	.011
18(3)	offer career ed. in middle schools	-.162	.001
19(1)	voc. ed. needs highly specialized facilities & equip.	-.169	.001
20(1)	teachers should have high skill, work exp., degree, & license	-.134	.007
21(3)	important to use voc. ed. funds for new facilities	-.108	.037
22(7)	T.V. influenced my opinion	-.122	.014
22(8)	did not know much about voc. ed.	-.138	.006

not place high value on university degrees and teaching licenses for vocational teachers (Table 13).

This employer population indicates that it is more important to provide many students with a basic education than to use the time for vocational education. They perceive vocational education as hindering students from further education after high school and see most occupational education programs currently offered in high school as being out-of-date. They do not advocate career education in kindergarten through middle school.

Highly specialized facilities and equipment for vocational education programs are not perceived as necessary by employers nor do they think it important to use vocational education funds

for building new facilities for vocational education programs. This group indicates that they are informed and knowledgeable concerning vocational education.

Factors Important in Vocational Education

In an attempt to identify those variables that are determinants of a positive/favorable perception of vocational education, a factor analysis is made in which eleven components are factored out of sixty-two items. This section identifies these factors and discusses their implications.

The factor with the greatest number of statements with high loadings can be called *Status Position of Vocational Education*. Responses to seven statements in this factor indicate that vocational education has a low status (Table 14).

This suggests that students in vocational educational programs are held in low esteem by others, a view which has been identified in earlier research. Apparently, vocational educators have not succeeded in combating this view, or they have neglected to devote enough effort in this direction. The results of this study suggest that concentrated attention be focused on informing the public of the academic caliber of vocational education, of the nature and content of courses of instruction, of the level of skill developed, and of future opportunities for vocational education graduates.

A second factor can be called *Pro-early Career Education;* it includes four statements with high loadings (Table 15).

This factor seems to suggest that emphasis be placed on career education through the early years of schooling. Based on information from the limited number of schools in Indiana that have an integrated career education program, the presence of this factor may indicate a desire on the part of the public to increase the number of schools with career programs.

A vocational program area or an occupational cluster can be defined as a group of recognized occupations having many similarities, including the following characteristics, in common: (1) the type of work performed, (2) the basic aptitudes, acquired knowledge, and training required, and (3) the tools, machines, instruments, other equipment, and basic materials used.

Factor 3 indicates that the public does not see all such areas as being of equal importance, value, or status. The public views the elements included in Factors 4 and 5 as being different from those included in Factor 3, but additional re-

TABLE 14: FACTOR 1, STATUS POSITION OF VOCATIONAL EDUCATION

	Statement	*Factor-score coefficients*
4	Students enrolled in vocational education programs are thought to be in a less desirable program than general or academically oriented students.	.382
10	The occupational education program in high school should be geared mainly for youth of limited academic talent.	.566
13	In my opinion taking occupational education hinders students from further education after high school.	.426
14	Most occupational education programs currently offered in high school are out-of-date.	.360
17(1)	Graduates of vocational education programs are generally suited only for unskilled work.	.497
17(2)	Graduates of vocational education programs work with their hands rather than their minds.	.614
17(4)	Graduates of vocational education programs have little or no chance of advancement.	.587

TABLE 15: FACTOR 2, PRO-EARLY CAREER EDUCATION

	Statement	*Factor-score coefficients*
18(1)	Career education should be taught in kindergarten and primary grades.	.565
18(2)	Career education should be taught in elementary grades.	.710
18(3)	Career education should be taught in middle school.	.723
18(4)	Career education should be taught in junior high school.	.585

search is needed to identify specific differences in attitudes. An examination of statements included in the three factors, suggests that Factor 3 be named *Pro-practical-service Occupations*, that Factor 4 be named *Pro-scientific, Technical Occupations*, and that Factor 5 be named *Pro-physical Labor Occupations* (Tables 16, 17, and 18).

Additional research may also help explain why there are differences in attitude toward the various program areas of vocational education. Differences in perceptions of these areas will have an influence on which program areas students are encouraged to consider, how the students feel about themselves if they are enrolled in one of the areas, and the zeal with which such areas are supported by all segments of the community.

Factor 6, called *Influences*, indicates factors which have shaped public opinion about vocational education (Table 19).

The findings from the study suggest that personal and active involvement in vocational education effectively influences people's perceptions. It may also indicate that other approaches have not been employed or if they have been employed that they were not dynamic.

TABLE 16: FACTOR 3, PRO-PRACTICAL-SERVICE OCCUPATIONS

	Statement	*Factor-score coefficients*
15(3)	Vocational education should offer students the opportunity to gain job entry skills in sales and service positions such as cashiers and stock boys.	.697
15(5)	Vocational education should offer students the opportunity to gain job entry skills in homemaking and related service occupations such as restaurant cooks.	.590
16(4)	It is important to include in the vocational education program training for office and clerical jobs such as secretaries and file clerks.	.496
16(6)	It is important to include in the vocational education program training in homemaking and related service occupations such as restaurant cooks.	.644

TABLE 17: FACTOR 4, PRO-SCIENTIFIC-TECHNICAL OCCUPATIONS

Statement		*Factor-score coefficients*
15(5)	Vocational education should offer students the opportunity to obtain job entry skills in health occupations such as practical nursing and dental assistants.	.590
15(7)	Vocational education should offer students the opportunity to obtain job entry skills in technical fields such as electronics and refrigeration.	.357
16(5)	It is important to include in the vocational education program training in health occupations such as practical nursing and dental assistants.	.641
16(7)	It is important to include in the vocational education program training in technical fields such as electronics and refrigeration.	.513
17(3)	Graduates of vocational education programs are skilled workers.	.354
19(1)	The facilities and equipment required for vocational education programs must be highly specialized.	.392

TABLE 18: FACTOR 5, PRO-PHYSICAL LABOR OCCUPATIONS

Statement		*Factor-score coefficients*
15(1)	Vocational education should offer students the opportunity to gain job entry skills in trade and industry occupations such as electricians and carpenters.	.625
15(2)	Vocational education should offer students an opportunity to gain job entry skills in agriculture and agribusiness such as farmers and chemical salespersons.	.640

continued on next page

TABLE 18 *continued*

16(1)	It is important to include in the vocational education program training in trade and industry.	.395
16(2)	It is important to include in the vocational education program training in agriculture and agribusiness.	.552

TABLE 19: FACTOR 6, INFLUENCES

Statement		*Factor-score coefficients*
22(1)	I completed or am enrolled in a vocational education program.	.498
22(4)	Teachers and school administrators have explained and discussed the vocational education program.	.593
22(5)	I have visited or observed vocational education programs.	.501

Factor 7 includes items which favor practical rather than theoretical education; it is called *Pro-practical Education* (Table 20). Factor 8 is composed of statements which have a college or university orientation. Because it suggests that there are those who place great value only on education that leads to higher education, it is called *Pro-college-and-university Factors* (Table 21).

From the responses received in this study it appears that the model for career education for Indiana is not well understood by the individuals interviewed. To inform the general public of the relationship between occupational preparation and career education, post-secondary institutions may find it helpful to provide for the public a more complete description of their educational programs and services and to do so in a vigorous and extensive way.

Factors 9, 10, and 11 had only 1-3 statements with moderate loadings suggesting they are weaker, less important factors (Tables 22, 23, and 24).

TABLE 20: FACTOR 7, PRO-PRACTICAL EDUCATION

	Statement	*Factor-score coefficients*
5	In my opinion most public schools do not provide vocational education programs early enough.	.517
6	For many students in high school there should be greater emphasis on earning a living through occupational education.	.519
8	Free occupational education after high school should be available to students currently enrolled in high school occupational programs.	.392
12	There should be more money set aside in the school budget for occupational education.	.621

TABLE 21: FACTOR 8, PRO-COLLEGE-AND-UNIVERSITY

	Statement	*Factor-score coefficients*
18(6)	Career education should be taught in junior colleges and technical schools.	.556
18(7)	Career education should be taught in four year colleges and universities.	.607
18(8)	Career education should be taught in adult education programs.	.400
20(1)	Teachers of occupational classes should be persons who are highly skilled, have work experience, a university degree, and a teaching license.	.438

Identification of these factors can help future researchers to develop their research instruments and to place in priority order the aspects of vocational education they will study. Related research may wish to experiemnt with changing attitudes or to investigate influences that shape opinions.

TABLE 22: FACTOR 9

	Statement	*Factor-score coefficients*
1	It is more important to provide many students with a basic education of reading, writing, and arithmetic than to use the time for vocational education.	.368
20(2)	The teachers of occupational classes should be persons who are highly skilled, have work experience, a university degree, but not a teaching license.	.494

TABLE 23: FACTOR 10

	Statement	*Factor-score coefficients*
3	The results realized from vocational education programs are beneficial to the communities involved.	.390
7	I should like to see the values of occupational education made known to more parents than is now the case.	.350
21(1)	An important use of vocational education funds is for programs and services for high school youth.	.380

TABLE 24: FACTOR 11

	Statement	*Factor-score coefficients*
19(2)	The facilities and equipment required for vocational education programs can be adapted from those of a regular classroom.	.385

CHAPTER IV

CONCLUSIONS AND RECOMMENDATIONS

Conclusions

Based on the findings of this study the following conclusions are drawn:

- Vocational education in Indiana is perceived more favorably than unfavorably.
- Program areas within the total vocational education program in Indiana are not all viewed in the same manner by the population.
- Perceptions and opinions related to vocational education are influenced to a greater degree by personal and physical exposure to vocational education programs than by more indirect or passive means.
- School personnel, including teachers, guidance counselors, and administrators, have the rather negative perception that vocational education is low status.
- Aspects of vocational education in Indiana about which respondents indicate indecision include: (1) at what time in the total school sequence vocational education should be offered, (2) how up-to-date vocational education programs are, (3) the facilities and equipment needed for vocational education programs, (4) the qualifications of teachers of occupational programs, and (5) whether it is more important for most students to have an academic or a vocational orientation.
- Respondents are not decisive regarding the appropriate levels at which career education should be included in the educational program.

Recommendations

As a result of the findings in this investigation, these

recommedations are made:

- In-service education focused on the principles, purposes, benefits, and potentials of vocational education should be directed toward school teachers, guidance counselors, and administrators.

- The development and implementation of a promotional program should receive priority attention from vocational educators. Such a program should provide direct involvement in vocational education activities for the various publics in the community.

- Vocational educators should plan an on-going promotional effort that provides for community involvement on a regular basis. Times and activities should be specified. Some activities might be designed to promote vocational education generally. Others need to focus on particular service areas in vocational education.

- A more dynamic liaison with the employers of vocational education graduates should be developed by vocational educators. Such a directed effort might serve to produce a more positive perception of the contribution vocational education makes to a skilled pool of workers for industry.

- Junior high school students should be more fully informed concerning the vocational education programs available.

APPENDICES

APPENDIX A : RESEARCH INSTRUMENT

THE PUBLIC'S PERCEPTION OF VOCATIONAL EDUCATION IN INDIANA

I am _____, a research assistant at Purdue University. I am collecting information concerning vocational education. Your name was selected in a random sample of _____ from the _____ school corporation. We would very much like to have you react to some statements indicating how you feel about vocational education. The information you supply will make a definite contribution toward improving the educational programs in Indiana.

You need to know that the information you give is strictly confidential and will in no way be identified with you at any time. You may choose not to respond, or if this is a busy time for you, I will be happy to call you later at a time you prefer. It will probably take no longer than _____ minutes of your time to participate in this research project.

Will you take part in this survey by indicating whether you agree, disagree, are undecided, don't know, or have no opinion about 22 statements concerning vocational education?

_____ Yes _____ No

Thank you for agreeing to assist in this study

I am sorry you are unable to assist us in this study. Thank you for your time and attention.

I will read a statement about vocational education and ask you to give me your opinion. To help you in making your responses would you write the possible responses on a piece of paper. The four choices for responses are:

APPENDIX A *continued*

No. 3 Agree
No. 2 Undecided
No. 1 Disagree
No. 0 Don't know--no opinion

Do you have these jotted down?

You may choose any of these responses. There are no right or wrong answers. Your opinion is what is wanted. I will read each statement once. If you would like me to repeat it I will be glad to do so. Before I read the first statement, do you have any questions?

I will read the first statement. Please tell me if you agree, disagree, are undecided, don't know, or have no opinion about the statement.

* 1. It is more important to provide many students with a basic education of reading, writing, and arithmetic than to use the time for vocational education.

2. Vocational education in the public school serves to prevent high school drop-outs.

3. The results realized from vocational education programs are beneficial to the communities involved.

* 4. Students enrolled in a vocational education program are thought to be in a less desirable program than general or academically oriented students.

5. In my opinion most public schools do not provide vocational education programs early enough.

6. For many students in high school there should be greater emphasis on earning a living through an occupational-education program.

7. I should like to see the values of occupational education made known to more parents than is now the case.

8. Free occupational education after high school should be available to students currently enrolled in high school occupational programs.

---

* Items labeled *negative* to vocational education by 80 percent of the judges.

APPENDIX A *continued*

* 9. Vocational education is not needed to insure an adequate and efficient supply of labor.

* 10. The occupational education program in high school should be geared mainly for youth of limited academic talent.

11. Both boys and girls should be encouraged to enter any of the occupational education programs.

12. There should be more money set aside in the school budget for occupational education.

* 13. In my opinion taking occupational education hinders students from further education after high school.

* 14. Most occupational education programs currently offered in high schools are out-of-date.

15. I will read several broad types of occupations. As you hear each one, consider whether or not you think vocational education should offer students the opportunity to obtain job entry skills in these kinds of occupations. I will read all seven to give you the entire group. I will then read each one individually for your response. The seven broad groups are as follows:

(1) trades and industry such as electricians and carpenters
(2) agriculture and agribusiness such as farmers and chemical salespersons
(3) sales and service positions such as cashiers and stock boys
(4) office and business jobs such as secretaries and file clerks
(5) health occupations such as practical nursing and dental assistants
(6) homemaking and related service occupations such as restaurant cooks
(7) technical fields such as electronics and refrigeration

I will now read them individually. As you hear each one would you say that you agree, disagree, are undecided, don't know, or have no opinion whether vocational education should offer students the opportunity to gain job entry skills in these kinds of occupations. (Repeat items above.)

16. This next statement is related to the one you just completed. I would like to know which of the seven broad groupings of occupations you think are very important, which are fairly important, or which are not important to be included in vocational education programs. I will read all seven, then repeat each for your responses.

    (1) trades and industry such as electricians and carpenters
    (2) agriculture and agribusiness such as farmers and chemical salespersons
    (3) sales and service positions such as cashiers and stock boys
    (4) office and clerical jobs such as secretaries and file clerks
    (5) health occupations such as practical nursing and dental assistants
    (6) homemaking and related service occupations such restaurant cooks
    (7) technical fields such as electronics and refrigeration

    I will now read each one individually. Would you say if you think it very important, fairly important, or not important to be included in vocational education programs in secondary schools? (Repeat items above.)

17. These next questions concern your overall view of occupational programs. I will read the entire list of statements and then read each one individually. Please indicate whether you agree, disagree, are undecided, don't know, or have no opinion about each statement.

    * 1. Graduates of vocational education programs are generally suited only for unskilled work.

    * 2. Graduates of vocational education programs work with their hands rather than their minds.

      3. Graduates of vocational education programs are skilled workers.

    * 4. Graduates of vocational education programs have little or no chance for advancement.

      5. Graduates of vocational education programs have a variety of avenues to advancement open to them.

I will now read each one individually. Please say if you agree, disagree, are undecided, don't know, or have no opinion about each. (Repeat items above.)

18. This next statement deals with where in school sequence career education should be included. Facts that inform students sbout kinds of jobs and the skills needed for certain kinds of work plus opportunities to gain skill in some specific occupation may be termed career education. I will read several levels of schooling where students might receive education that would help them choose an occupation in which they could become successful.

    1. Career education should be taught in kindergarten and primary.

    2. Career education should be taught in elementary grades.

    3. Career education should be taught in middle school.

    4. Career education should be taught in junior high school.

    5. Career education should be taught in senior high school.

    6. Career education should be taught in junior colleges and technical schools.

    7. Career education should be taught in four year colleges and universities.

    8. Career education should be taught in adult education programs.

    I will now read each one individually. Please indicate if you agree, disagree, are undecided, don't know, or have no opinion whether career education should be included in each level of schooling. (Repeat items above.)

19. This next statement deals with the kinds of facilities and equipment required for vocational programs. I will read the entire group of statements nd then read each one individually. Please indicate whether you agree, disagree, are undecided, don't know, or have no opinion about each statement.

1. The facilities and equipment required for vocational education programs must be highly specialized.

2. The facilities and equipment required for vocational education programs can be adapted from those of a regular classroom.

* 3. The facilities and equipment required for vocational education programs are no different than those needed for academic classes.

4. The facilities and equipment required for vocational education programs can be borrowed from local industry.

I will now read each one separately. Please say if you agree, disagree, are undecided, don't know, or have no opinion about each. (Repeat items above.)

20. I would next like to know who you think should teach occupational classes. I will read four statements describing several levels of abilities. I will read all four then read each one individually for your response.

1. The teachers of occupational classes should be persons who are highly skilled, have work experience, a university degree, and a teaching license.

2. The teachers of occupational classes should be persons who are highly skilled, have work experience, a university degree, but not a teaching license.

3. The teachers of occupational classes should be persons who are highly skilled, have work experience, but do not have a university degree nor a teaching license.

4. The teachers of occupational classes should be persons who have some skill, limited work experience, a university degree, and a teaching license.

I will repeat each individually. You may agree, disagree, be undecided, don't know, or have no opinion about all or some of these statements concerning teachers of occupational classes. (Repeat items above.)

21. I would next like you to respond to some statements

which indicate how you feel about the use of vocational education funds. I will read all five statements then read each one individually for your response. Please indicate if you agree, disagree, are undecided, don't know, or have no opinion about each.

1. An important use of vocational education funds is for programs and services for high school youth.

2. An important use of vocational education funds is for programs and services for out-of-school youth and adults.

3. An important use of vocational education funds is for building new facilities for vocational programs.

* 4. An important use of vocational education funds is for academic programs.

5. An important use of vocational education funds is for programs and services for people with special needs.

I will now read each one individually for your responses. Please indicate if you agree, disagree, are undecided, don't know, or have no opinion. (Repeat items above.)

The next question provides factual information.

22. What factors influenced you most in the opinion you have concerning vocational education? I will read eight factors. You may indicate more than one if it applies to you.

Did this influence you?

1. I completed or am enrolled in a vocational education program.

Did this influence you?

2. My child or someone I know personally completed or is enrolled in a vocational education program.

Did this influence you?

3. I have read materials describing vocational education programs.

APPENDIX A *continued*

Did this influence you?

4. Teachers and school administrators have explained or discussed the vocational educational program.

Did this influence you?

5. I have visited or observed vocational education programs.

Did this influence you?

6. General discussion and comments from community members influenced my opinion.

Did this influence you?

7. My opinion was influenced by information presented on T.V.

Did this influence you?

8. I did not know much about vocational education because I have not personally been involved, nor have I heard, seen, or read very much about vocational education.

These are all of the statements I would like you to respond to. Thank you very much for your time and responses. Your cooperation has made a contribution to education in Indiana.

Do you have any questions or comments you wish to make?

Thank you again for your cooperation.

APPENDIX B

LIST OF COOPERATING SCHOOLS

Beech Grove Senior High School
Beech Grove Junior High School
Beech Grove, IN

Ben Davis High School
Ben Davis Junior High School
Indianapolis, IN

Carmel High School
Carmel Junior High School
Clay Junior High School
Carmel, IN

Culver Community High School
Culver, IN

Dekalb High School
Dekalb Junior High School
Waterloo, IN

Donald E. Gavit High School
Donald E. Gavit Middle School
Hammond, IN

Edinburg Community High School
Edinburg, IN

James Whitcomb Riley High School
Andrew Jackson Middle School
South Bend, IN

Princeton Community High School
Princeton Community Middle School
Princeton, IN

Valparaiso High School
Ben Franklin Junior High School
Thomas Jefferson Junior High School
Valparaiso, IN

Wayne High School
Ben F. Geyer Junior High School
Miami Junior High School
Fort Wayne, IN

Westfield Washington High School
Westfield Middle School
Westfield, IN

APPENDIX C

PROJECT ADVISORY COMMITTEE MEMBERS

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Area Director of Vocational Education
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OTHER

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- *Vocational Programs in Indiana for the Disadvantaged and Handicapped*, edited by Elaine G. Eigeman. Abstracts and synthesizes current Indiana vocational programs for special needs students in the special projects funding category. 1977, 64 pp. (Report Series No. 2).

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